

UNITED STATES OF AMERICA
POSTAL REGULATORY COMMISSION
WASHINGTON, DC 20268-0001

Before Commissioners:

Ruth Y. Goldway, Chairman;
Nanci E. Langley, Vice Chairman;
Mark Acton;
Tony Hammond; and
Robert G. Taub

Modification of Analytical Principles
in Periodic Reporting
(Proposals Sixteen through Twenty)

Docket No. RM2012-2

ORDER CONCERNING ANALYTICAL
PRINCIPLES FOR PERIODIC REPORTING
(PROPOSALS SIXTEEN THROUGH TWENTY)

(Issued June 26, 2012)

I. INTRODUCTION

In Order No. 203, the Commission adopted periodic reporting rules pursuant to 39 U.S.C. 3652.¹ Those rules require the Postal Service to obtain advance approval, in a notice and comment proceeding under 5 U.S.C. 553, whenever it seeks to change the analytical principles that it applies in preparing its periodic reports to the Commission required by section 3652.

On November 30, 2011, the Postal Service filed a petition pursuant to 39 CFR 3050.11 requesting that the Commission begin a rulemaking proceeding to consider five

¹ Docket No. RM2008-4, Order No. 203, Notice of Final Rule Prescribing Form and Content of Periodic Reports, April 16, 2009.

proposals to change the analytical methods approved for use in periodic reporting.²

The proposals are labeled Proposals Sixteen through Twenty.

Proposal Sixteen introduces a new method for measuring the productivity of Flats Sequencing System (FSS) operations based upon Management Operating Data System (MODS) data.

Proposal Seventeen consolidates MODS operation groups associated with the productivity calculations for the DBCS/DIOSS automated letter image reading and sorting operations. This change responds to changes in the definition of certain MODS operations.

Proposal Eighteen includes four modifications to the flats cost models. Modification One incorporates FSS processing costs into the First-Class Mail, Standard Mail, and Periodicals flats cost models. Modification Two corrects an “anomalous” difference in costs between Mixed Area Distribution Center (MADC) automation flats and Area Distribution Center (ADC) automation flats in the First-Class Mail, Standard Mail, and Periodicals flats cost models. Modification Three corrects an error in the calculation of the cost of mechanized ADC pallet bundle sortation in those same models. Modification Four modifies the Periodicals flats cost model to include an estimate for the costs of bundles entered on MADC pallets—a newly-created price category.

Proposal Nineteen modifies the mail processing cost model applicable to First-Class presort letters to estimate the avoided cost of converting Mixed Automated Area Distribution Center (MAADC) flats to Automated Area Distribution Center (AADC) flats would avoid.

Proposal Twenty updates the Business Reply Mail cost model as it relates to fees. As part of this proposal, the Postal Service provides support for continuing to use

² Petition of the United States Postal Service Requesting Initiation of a Proceeding to Consider Proposed Changes in Analytical Principles (Proposals Sixteen through Twenty), November 30, 2011 (Petition).

the current model to estimate the avoided costs on which the Qualified Business Reply Mail (QBRM) barcode discount depends.

The Commission approves Proposals Sixteen through Nineteen. Concerning Proposal Twenty, the Commission approves the fee model updates, but modifies the method by which the costs avoided by QBRM are estimated. Each proposal is discussed below.

II. PROPOSAL SIXTEEN—PRODUCTIVITY MEASUREMENT FOR FLATS SEQUENCING SYSTEM

A. Postal Service Proposal

The Postal Service routinely updates its cost avoidance models to reflect operational changes. Since the FSS is now fully deployed, the Postal Service proposes to incorporate FSS data into its flats mail processing cost models.³ To capture FSS costs, it proposes to measure the productivity of FSS operations using MODS data. Data on the productivity of the two major FSS components: Stand-Alone Mail Prep (SAMP, MODS operation 530) and the FSS sorter (MODS operation 538) would be used. Petition at 3.

FSS productivity would be defined as pieces sorted per workhour. The numerator of this fraction would consist of the machine count of Total Pieces Fed (TPF) in the first FSS sort operation (MODS operation 538).⁴ The denominator of this fraction would consist of the sum of the FSS workhours logged for the prep operation (530) and

³ Reply Comments of the United States Postal Service Regarding Proposal Eighteen, February 23, 2012, at 3 (Postal Service Reply Comments to Time Inc.).

⁴ In its response to Chairman's Information Request No. 1, the Postal Service confirmed that TPF would be used rather than Total Pieces Handled (TPH). *Id.* at 4. Response of the United States Postal Service to Chairman's Information Request No. 1, January 10, 2012, question 1 (Postal Service Response to CHIR No. 1).

the sorting operation (538).⁵ The proposed new productivity measure would be an additional input into the flats mail processing cost models used to calculate presort cost avoidances. Since the FSS productivity measure is new, the Postal Service notes that there are no data to predict the impact of FSS productivity on cost avoidances. Petition at 4.

B. Participant Comments

Comments specific to Proposal Sixteen were filed by the Public Representative.⁶ The Public Representative questions whether the proposed FY 2011 FSS productivity ratio is a realistic estimate since it is much lower than the weighted average of the Automated Flat Sorting Machine 100 (AFSM 100) operations productivity ratio (TPH per workhour). The Postal Service explains that the FSS productivity ratio is not comparable to the AFSM 100 productivity ratios because FSS sorting is a two-pass process, while AFSM 100 sorting is a single-pass process, and the AFSM 100 productivity figures do not include flats prep workhours from MODS AFSM 100 prep operations 035 and 140 in the denominator. Postal Service Response to CHIR No. 1, question 2. Thus, the Postal Service concludes that the lower FSS productivity ratio of 833 TPF per workhour is the result of including FSS prep hours in the denominator and the TPF count for only the first pass in the numerator. According to the Postal Service, re-feeding the piece for the second pass does not result in an additional TPF count in operation 538.⁷

⁵ TPF usually is interpreted as the Total Pieces Fed. In the case of the FSS machine, the "TPF" used for the FSS productivity ratio calculation in Proposal Sixteen does not actually represent the Total Pieces Fed. It represents only total pieces sorted on the first pass. The Postal Service reports that the FSS machine only counts the first-pass although most pieces need two passes to be sorted into delivery point sequence (DPS). Postal Service Response to CHIR No. 1, question 2.

⁶ Revised Comments of the Public Representative, January 3, 2012 (PR Comments).

⁷ "[E]xception[s] would be pieces withdrawn from the machine as first-pass rejects, and a small fraction of pieces will be finalized on the first pass. MODS data showed that the FY 2011 reject rate was 10.5 percent..., implying that pieces inducted into the FSS machine receive approximately 1.9 sort passes on average." *Id.* question 2 n.1.

To demonstrate that the relatively low productivity numbers for the FSS are the result of including the prep hours in the denominator (and not a defect of the FSS machine), the Postal Service recalculates the FSS productivity ratio without the FSS prep workhours in the denominator. This alternate method of calculating the ratio would more than double FSS distribution productivity to 1,981 TPF per workhour and 1,770 TPH per workhour. However, the alternative method of calculating the FSS productivity ratio would still fall substantially short of the Postal Service's productivity target of 2,711 TPH/hour.⁸ *Id.*

The Public Representative asserts that had FSS and AFSM 100 prep and sorting operational data been provided, the reliability of the FSS Stand-Alone Mail Prep operation could have been evaluated and the AFSM 100 prep and sorting operational data used to determine a better proxy for true FSS productivity. PR Comments at 2-3. The Postal Service disagrees. It asserts that using the FSS main machine count is conceptually and operationally superior to any proxies based on AFSM 100 productivities. It argues that the FSS prep operation data would be less accurate than the FSS machine count because the prep data are based on employee manual entries and container-to-piece conversions.⁹ Postal Service Reply Comments at 2.

The Public Representative asserts that inserting the apparently low FSS productivity ratio value into the flats cost models produces counter-intuitive results as evidenced by increases in the modeled estimated flats unit costs when the FSS was supposed to have been more efficient than the AFSM 100. PR Comments at 3. The Postal Service disagrees. It argues that an increase in flats processing unit costs is expected because the FSS now includes the flats sequencing sortation function that was previously done manually by the carrier. Postal Service Reply Comments at 2.

⁸ The Postal Service explains that the FSS TPH is a count of successfully sorted (first-pass) pieces. Petition at 3.

⁹ Reply Comments of the United States Postal Service, January 10, 2012 (Postal Service Reply Comments). The Postal Service also filed a Motion for Late Acceptance of Reply Comments of the United States Postal Service, January 10, 2012. The motion is granted.

The Postal Service asserts the FSS productivity ratio is realistic. It explains the reasons that FSS productivity is not necessarily lower than the AFSM 100 productivity. Accordingly, it believes the Public Representative's recommendation to either obtain additional data or reject Proposal Sixteen is unwarranted, and should be rejected. *Id.* at 3.

C. Commission Analysis

The Commission approves Proposal Sixteen. This modification will better align the flats cost models with operations in the new FSS environment. Although the Public Representative and the Postal Service disagree on whether the introduction of the FSS inputs produces counter-intuitive results, the inputs reduce the Cost and Revenue Analysis (CRA) adjustment factor in all the estimated flats cost models. This suggests that it improves the ability of these models to estimate total flats costs.¹⁰

The Postal Service also adequately explains the reasons that the FSS productivity ratio is not necessarily lower than the AFSM 100 productivity ratio. It notes that FY 2011 was a transitional year and did not provide a picture of the full-up capabilities of FSS.¹¹

The Postal Service's use of the MODS FSS TPF count in the numerator of the FSS productivity ratio is consistent with the treatment of single-pass automated

¹⁰ See files included with RM2012-2 Petition, Prop18StdFlats.xls (worksheet: "CRA ADJ Unit Cost"), Prop18FCMFlats.xls (worksheet: "CRA ADJ Unit Cost"), and Prop18PERFlatsrevised.xls (worksheet: "CRA Flats"). Estimated model unit costs calculations for First-Class Mail and Standard Mail flats cost models are shown in the respective EXCEL files with worksheet tab names ending with the word "Cost". The Periodical flats cost model EXCEL file shows the estimated modeled unit costs calculations below the Mail Flow Model Diagrams in the worksheets named "MADC", "ADC", "3D", "5D", "FSS" and "CR".

¹¹ See Docket No. ACR 2010, Responses of the United States Postal Service to Questions 1-22, 24-26 of CHIR No. 4, question 3c, February 28, 2011. "Both FY 2010 and FY 2011 represent transition years in which machines were being deployed and tested and used for increasing numbers of zones, but neither 2010 nor 2011 provide a picture of what these machines are capable of doing when they are "full up". During FY 2011, the procedures for FSS are being adopted and adapted, and zones are gradually being added to enable a smooth transition. As deployments occur and operations ramp up, we will examine the available data and provide and use them as possible to best reflect flat sorting costs."

distribution operations. However, in measuring the productivity of other flats processing operations, hours incurred in the prep operation are not added to hours incurred in the automated sort operations in the denominator. Similarly, in measuring the productivity of other flats processing operations, the first pass on the sorting machine is the only pass. Therefore, as to those flat operations, there is no issue of using only a partial count of sorts performed to measure productivity.¹²

Although the Commission is approving Proposal Sixteen, the MODS FSS prep operational data provided in another docket raises questions as to their accuracy and reliability. In FY 2011, 29 percent of the MODS FSS SAMP observations had positive workhours corresponding with zero FSS volume.¹³ For this reason, it is not clear whether using the AFSM 100 prep and sorting operational MODS data as a proxy would have produced a more accurate FSS productivity ratio. Currently, no cost models for flats processing make direct use of MODS data for prep operations as inputs to the flats

¹² An FSS machine generally counts a single sort for every two performed because the FSS performs both sorting passes consecutively without sweeping or reloading the machine. See slide 11 notes in USPS, FSS System Overview, PCC Workshop-in-a-Box, Module 2. Presentation found on-line at: https://ribbs.usps.gov/flat/documents/Presentations_Communication_Resources/Workshops_in_a_Box/FSS.Workshop.Box_Module2.ppt.

¹³ USPS-LR-N2012-1/86, Public Materials Provided in Response to POIR No. 7, question 2. A non-public version of this material is provided in Library Reference USPS-LR-N2012-1/NP22 (FY 2011 Daily Tour MODS Data). FY 2011 MODS data for the FSS prep operation (operation 530) have a much higher percentage of observations where positive workhours are matched with zero volume than is true of MODS data for the AFSM prep operation. In MODS operation codes 035 and 140, only 14 percent and 2 percent of the logged prep workhours, respectively, have positive workhours associated with zero volume. All percentages are based on MODS data disaggregated by day and tour. It is unclear whether audits of these data would correct these anomalies. Currently, some facilities exhibit such anomalies for extended periods, including from year-to-year.

The MODS Operational Definition for the FSS prep operation 530 lists the MODS operation data requirements as:

- a. Manually record the number of trays processed WebEOR.
 - b. WebMODS will compute and report volume as TPH.
- ACR2010, USPS-FY10-44 as ChIR.4.Q.17.MODS.pdf.*

cost avoidance models.¹⁴ MODS data filed in Docket No. N2012-1 for FY 2011 show that there are FSS hours (DPS machine sort mode/operation 538) with either no corresponding TPF, no corresponding TPH, or with a negative TPH or TPF.¹⁵ Since the FSS volume measures are based on automated machine counts, it is unclear why these workhours reflecting FSS sorting have no corresponding volumes. With these continuing uncertainties, it is important for the Postal Service to continue to explore areas where the FSS sort and prep operational data can be improved.

III. PROPOSAL SEVENTEEN—CONSOLIDATED MODS OPERATION GROUPS FOR LETTER AUTOMATION PRODUCTIVITIES

A. Postal Service Proposal

The Postal Service proposes to consolidate certain MODS operation groups for letter automation productivity calculations. Petition at 5. The Postal Service explains that this modification is necessary to account for changes to certain MODS operation definitions in FY 2011 and FY 2012. The changes to MODS operation definitions were put in place “to promote more accurate use of a streamlined set of operation numbers.” *Id.* In Response to CHIR No. 1 question 7, the Postal Service further explains that this will reduce the cost of having “employees re-clock promptly for every change of work activity that may be represented by a distinct MODS operation number.”

¹⁴ However, the Periodicals model does use two AFSM flats prep productivity ratios inputs in its unit costs calculations based on data collected from an on-site USPS 2008 Flats Field Study. See Docket No. ACR 2008, Library Reference USPS-FY-08-14.

¹⁵ In FY 2011, about 58,800 (5 percent) of the FSS sorting workhours had no associated handlings. See Library Reference USPS-LR-N2012-1/86, Public Materials Provided in Response to POIR No. 7, question 2. A non-public version of this material is provided in Library Reference USPS-LR-N2012-1/NP22. All percentages are based on MODS data disaggregated by day and tour.

In Proposal Seventeen, the Postal Service aligns the MODS cost pools with the revised definitions of MODS operation groups. To this end, the Input Subsystem (ISS)¹⁶ and Output Subsystem (OSS)¹⁷ operation groups are merged into specific Incoming and Outgoing Barcode Sorting (BCS) operation groups. Petition at 6. The Postal Service explains that these consolidations are appropriate because the machines use multimode processing, which merge the ISS/OCR (Optical Character Recognition) and OSS functions. See Postal Service Response to CHIR No. 2, questions 1 and 2. The Postal Service also modifies the First-Class Mail and Standard Mail letter mailflow models that use the previously disaggregated ISS and OSS productivity data to now use the consolidated BCS operation groups listed in the Petition at 6.

The Postal Service provides the impact of the proposed consolidation on the TPF/Hour for each of the impacted groups. Petition at 7. Further, in response to information requests, the Postal Service also provides the impact of Proposal Seventeen in the First-Class Mail and Standard Mail processing cost avoidance models. See Postal Service Response to CHIR No. 1, question 6; Postal Service Response to CHIR No. 2, question 3. The Postal Service shows that the impact of Proposal Seventeen on First-Class Mail unit mail processing costs ranges from a 0.917 cent decrease for Nonautomation Presort Letters (machinable) to a 0.046 cent increase for Automation MAADC Presort Cards. For Standard Mail, the impact of Proposal Seventeen ranges from a 0.402 cent decrease for Nonautomation ADC/AADC Presort Letters, to a 0.111 cent increase for Nonautomation 3-Digit Letters. *Id.*

¹⁶ A component of the Remote Barcode System (RBCS) for letter-shaped mail that “‘lifts’ and transmits images of mailpieces for offline processing to resolve the delivery address, and applies an ID tag to the letter so that the piece can be matched to the resolved address in subsequent processing.” See Postal Service Response to Chairman’s Information Request No. 2, question 1 (Postal Service Response to CHIR No. 2).

¹⁷ A component of the RBCS for letter-shaped mail that “matches the address result with the mailpiece using the ID tag, applies a barcode to the address face of the piece, and performs an initial sort of the piece based on the result.” See Postal Service Response to CHIR No. 2, question 1.

B. Participants Comments

The Public Representative filed initial comments, and the Postal Service filed reply comments regarding Proposal Seventeen.

The Public Representative focuses on the impact of Proposal Seventeen on the Standard Mail Letter mail processing cost avoidance model and potential complications arising from the Commission's approval of Proposal Twelve in Docket No. RM2012-1.¹⁸ Petition at 5-7. He is concerned that anomalous estimates may occur for the Standard Mail Letters mail processing unit avoided costs as a result of the combined impact of Proposal Twelve and Proposal Seventeen. For example, he calculates that the unit avoided cost for Automation Mixed AADC Letters will be negative. PR Comments at 5. He concludes that the Commission should request that the Postal Service file a version of the Standard Mail Letter mail processing cost avoidance model that incorporates Proposal Seventeen modifications to ensure that the changes do not lead to anomalous avoided cost estimates. *Id.* at 7.

The Postal Service filed an updated Standard Mail avoided cost model that shows no anomalous estimates result from the inclusion of both Proposal Twelve and Proposal Seventeen modifications. See Postal Service Response to CHIR No. 1; Postal Service Response to CHIR No. 2. In its reply comments, the Postal Service highlights that the Public Representative did not question the appropriateness of Proposal Seventeen, only the existence of potential anomalous unit cost estimates. Postal Service Reply Comments at 3. Because it has demonstrated that no anomalous unit cost estimates exist, the Postal Service maintains that the Commission should approve Proposal Seventeen. *Id.*

¹⁸ Proposal Twelve disaggregated the unit costs for Nonautomation Machinable MAADC and Nonautomation Machinable AADC. The Public Representative calculates that Proposal Seventeen will have the greatest impact on these unit costs. PR Comments at 5.

C. Commission Analysis

The Commission approves Proposal Seventeen. The Postal Service has provided data sufficient to address the concerns raised by the Public Representative. The Postal Service's proposal modifies the current productivities to better align with operational realities. The ISS and OSS functions no longer require separate processing modes on the mail processing equipment; therefore, it is reasonable for the Postal Service to consolidate these MODS operation codes into distinct BCS codes as described in its Petition.

IV. PROPOSAL EIGHTEEN—MODIFICATIONS TO THE FLATS COST MODELS (MODIFICATION ONE)

A. Postal Service Proposal

In Modification One, the Postal Service proposes to incorporate FY 2011 FSS processing costs into the First-Class Mail, Standard Mail, and Periodicals flats cost models. Petition at 8. Because the Postal Service filed Proposal Eighteen prior to the FY 2011 data being available, the original workpapers in this docket used FY 2010 data that included proxy parameters for unavailable data.¹⁹ *Id.* The FSS data that became available in FY 2011 include cost pool, productivity, volume-variability factor, coverage factors, accept rates, piggyback factors, and Mail Characteristics Study data. *Id.*

B. Participants' Comments

The Commission received initial comments regarding Proposal Eighteen, Modification One from the Public Representative and Pitney Bowes²⁰ with subsequent reply comments from the Postal Service. Time Inc. filed a Motion to Extend the Period

¹⁹ Proxies were used for the proportion of mail processed on the FSS, the number of pieces in FSS bundles, as well as the number of FSS bundles, and FSS productivities.

²⁰ Comments of Pitney Bowes Inc., December 30, 2011 (Pitney Bowes Comments).

for Comments, which was granted in part by the Commission.²¹ As a result of the extended comment period, the Commission received supplemental comments from Time Inc., which include appended comments by Halstein Stralberg,²² and additional reply comments from the Postal Service to Time Inc.

The Public Representative finds the components of Modification One reasonable, but questions the proxy used to estimate the FSS productivity. PR Comments at 9. Similarly, Pitney Bowes states that “FSS processing should be incorporated into the First-Class Flats cost model”, but questions the 20 percent FSS coverage factor used in Modification One because it overstates the percentage of First-Class Mail flats processed on FSS equipment. Pitney Bowes Comments at 2.

In response to the Public Representative’s and Pitney Bowes’ concerns, the Postal Service explains that it used these proxy parameters because at the time it filed Proposal Eighteen, operational data were not yet available. Postal Service Reply Comments at 3. However, in the FY 2011 Annual Compliance Report (ACR), the Postal Service “replaced most of the Proposal Eighteen models’ proxy parameters with operational data.” *Id.* at 3-4. The Postal Service characterizes the proxies that were not updated with operational data as associated with insignificant cost elements. *Id.* at 4. The Postal Service goes on to assert that only the mechanics of the Proposal Eighteen model should be evaluated in the instant docket, not the proxy parameters. *Id.*

Mr. Stralberg has five concerns with Proposal Eighteen, Modification One. He first discusses a formulaic error, where the Postal Service inadvertently divides the unit costs for machinable barcoded flats sorted on FSS by 20,000 instead of the standard

²¹ Motion of Time Inc. to Extend Period for Comments on Proposal Eighteen, January 23, 2012; Order Granting Motion of Time Inc. to Extend Period for Comments, February 2, 2012 (Order No. 1192). The Commission did not grant the request of Time Inc. to merge the 2011 ACR Comments with the comments in the instant docket.

²² Comments of Time Inc. on Proposal Eighteen, February 3, 2012 (Time Inc. Comments); see also attached Comments of Halstein Stralberg on the Serious Deficiencies of the Proposal Eighteen/ACR2011 Periodicals Flats Model, February 3, 2012 (Stralberg Comments).

10,000 pieces. Stralberg Comments at 2. The Postal Service corrected this error on February 6, 2012.²³

Second, Mr. Stralberg is concerned that the FSS acceptance rate is much lower than the AFSM 100 acceptance rate, which is used as a proxy in the flats cost models. Stralberg Comments at 4. Mr. Stralberg observes that TPH for FSS is lower than TPF. *Id.* When TPH is lower than TPF, it indicates that pieces are fed into a machine without completing the sortation process. Mr. Stralberg surmises that pieces that do not complete the sortation process are either (1) fed back into the machine and counted as an extra TPF; (2) diverted to another line of processing, likely manual sortation; or (3) destroyed and never delivered. *Id.* at 5.

The Postal Service is sympathetic to Mr. Stralberg's second concern, noting that the difference between TPF and TPH is significant. Postal Service Reply Comments to Time Inc. at 4-5. However, the Postal Service does not agree with Mr. Stralberg about what happens to the pieces that do not complete the sortation process. The Postal Service assumes that the majority of pieces that do not complete the sortation process either are (1) test pieces used to verify the machine is working properly; or (2) pieces initially rejected but re-fed because the pieces are submitted by mailers who are still becoming acclimated with FSS preparation requirements. *Id.* at 5. The Postal Service concludes that as personnel become more familiar with the FSS there should be fewer adjustments and lower reject rates, which will likely cause the difference between TPF and TPH to contract. *Id.*

Third, Mr. Stralberg is concerned that the unit cost of processing pieces on a FSS is higher than not processing pieces on a FSS, which is contrary to the expectations of the FSS. Stralberg Comments at 8-10. The Postal Service agrees that the current cost measures indicate that the combined piece handling and delivery costs of FSS are higher than non-FSS carrier route pieces, but notes that it is too early to

²³ United States Postal Service Notice of Filing of Errata to Attachment to Petition, February 6, 2012.

assess the cost efficiencies of the FSS. Postal Service Reply Comments to Time Inc. at 6.

Fourth, Mr. Stralberg is concerned that due to averaging of costs across FSS zones and non-FSS zones, the model has the effect of hiding some of the cost differential between carrier route and 5-digit presort in non-FSS zones. Stralberg Comments at 10. In future years, Mr. Stralberg believes that the portions of mail that are routed to FSS will increase; therefore, to ensure rates are based on costs, the Postal Service should provide tables that show costs associated with different types of mail preparation in non-FSS zones and FSS zones. *Id.* at 10-11.

The Postal Service asserts that there would be no benefit from providing the requested data because rate schedules do not differentiate between FSS zones and non-FSS zones, and the Postal Service does not plan to adjust rates to differentiate between FSS zones and non-FSS zones. Postal Service Reply Comments to Time Inc. at 6-7.

Fifth, Mr. Stralberg is concerned that the model understates the cost of piece sorting and overstates the costs of bundle, sack, and pallet handlings. He advocates a separate CRA adjustment for bundles, sacks, and pallets. Stralberg Comments at 11-15. Mr. Stralberg highlights this problem by showing that the modeled piece sorting costs for Outside County Periodicals are much lower than CRA unit mail processing attributable costs for piece sorting activities. *Id.* at 12.

In response, the Postal Service explains that it names cost pools based on the predominant activity reflected in the cost pool. Thus, piece-related activities are not the only type of activities captured in a piece-related cost pool. In contrast, the Postal Service observes that cost models include discrete activities, so that a piece-related activity is truly only piece-related. Because there is no one-to-one correspondence activity-wise between a cost pool and a similarly named modeled activity, the Postal Service concludes that it is inappropriate to compare piece-related cost pools to similarly named cost model activities. Postal Service Reply Comments to Time Inc. at 7-8.

In addition to his concerns, Mr. Stralberg suggests a modification to reclassify the Network Distribution Center (NDC) FSS cost pool as piece-related sorting. Stralberg Comments at 12 n.17. The Postal Service does not oppose Mr. Stralberg's modification to reclassify the NDC FSS cost pool as piece-related sorting; however, it notes that the NDC FSS cost pool is currently classified in accordance with approved Commission methodology. Postal Service Reply Comments to Time Inc. at 8.

C. Commission Analysis

The Commission approves Proposed Modification One to include FSS cost in the flats cost models for First-Class Mail, Standard Mail, and Periodicals. The Commission also approves Mr. Stralberg's proposal to reclassify the NDC FSS cost pool as piece-related.

The Public Representative's and Pitney Bowes' concerns about the use of proxies have been resolved in the Postal Service's FY 2011 ACR where it replaced most of the proxy data with actual operation data. According to the Postal Service, the few proxy data that remain in the model apply to insignificant cost elements. The Commission is satisfied that the Postal Service has been responsive; however, even though the remaining proxies are used for insignificant cost elements, the Postal Service should replace these proxies with actual operation data when feasible.

Mr. Stralberg proposed three modifications to the flats cost models: one related to a formulaic error, one related to the classification of the NDC FSS cost pool, and the other related to the CRA adjustment factor. He also proposed that the Postal Service report separate model costs for FSS and non-FSS flats and he raised two other issues, but with no accompanying proposals. The Commission discusses each below.

Regarding the formulaic error, the Postal Service corrected it and submitted a revised version. Thus, Mr. Stralberg's concern has been resolved.

Mr. Stralberg proposed to reclassify the NDC FSS cost as piece-related. Because the FSS is used to sort mail, it is sensible to treat the cost pool as piece-related. Further, the Postal Service is not opposed to the reclassification and in

Response to CHIR No. 4, it filed updated flats cost models that classify NDC FSS cost as piece-related.²⁴ For these reasons, the Commission approves Mr. Stralberg's proposal. The Commission has updated the flats cost models in Library Reference PRC-RM2012-2-LR1 to incorporate the reclassification of the NDC FSS cost.²⁵

As noted, Mr. Stralberg contends that CRA piece-related cost pools overstate piece-related cost as estimated by mail processing cost models. The Postal Service's explanation that comparing the two costs is inappropriate because there is no one-to-one correspondence between CRA cost pool and similarly named discrete cost model activities is reasonable. For this reason, Mr. Stralberg's proposed CRA adjustment factor is unnecessary. However, further examination of the content of CRA cost pools and their classification is warranted, especially if it is possible to redesign cost pools to reflect only piece-related activities rather than reflecting predominantly piece-related activities.

Mr. Stralberg also proposed that the Postal Service report model costs for FSS and non-FSS flats separately. The Commission agrees with the Postal Service that there is no need to report separate costs because there are no separate prices for flats delivered in a FSS zone versus in a non-FSS zone.

The substantial discrepancy between TPF and TPH, which indicates a relatively low acceptance rate, is a concern. However, the Postal Service contends the difference is a short-run problem and should contract over time. Postal Service Reply Comments to Time Inc. at 5. If the difference between TPF and TPH does not contract over time as the FSS matures, the acceptance rates included in the flats cost models will need to be monitored to ensure that they reflect operational reality.

Another concern raised by Mr. Stralberg is that the model estimates that FSS pieces are more expensive to process than non-FSS pieces. Stralberg Comments at 2. The Postal Service contends that "it is too early to assess the cost efficiencies of FSS."

²⁴ See Response of the United States Postal Service to CHIR No. 4, April 24, 2012.

²⁵ The flats cost models in Library Reference PRC-RM2012-2-LR1 contain the approved Commission methodology for future Commission proceedings.

Postal Service Reply Comments to Time Inc. at 6. If this unexpected outcome persists as the FSS matures, the model will likely need to be re-evaluated to ensure that it is accurately capturing mail processing costs.

The Commission finds that the Postal Service's overall approach of incorporating FSS-specific data into the Flats mail processing cost models is an appropriate first step, and approves Proposal Eighteen, Modification One. However, the Commission encourages the Postal Service to monitor the data and to make improvements as necessary. Most importantly, the Postal Service should ensure that as the FSS matures, the mailflow models included in the Flats mail processing models accurately reflect the actual FSS operations.

V. PROPOSAL EIGHTEEN—MODIFICATIONS TO THE FLATS COST MODELS (MODIFICATION TWO)

A. Postal Service Proposal

The Postal Service proposes to use Modification Two to correct “an anomalous” difference in costs between MADC automation and ADC automation flats in First-Class Mail, Periodicals, and Standard Mail. Petition at 9-10. Currently, the costs of MADC presorted flats are less than the costs of ADC flats that receive more mailer presorting. According to the Postal Service, this anomaly occurs because single-piece mail is currently included in the downflow densities. The Postal Service explains that single-piece mail is different from MADC mail in that it can both originate and destinate in the same sectional center facility (SCF) service territory. *Id.* For presort mail, by rule, intra-SCF mail has to be presented separately in origin 3-Digit containers and bundles. Therefore, including single-piece mail overstates the proportion of MADC mail that flows from the Outgoing Primary (OP) scheme directly to the Incoming Secondary (IS) scheme. *Id.* To mitigate the effect of including single-piece mail in the downflow densities, the Postal Service proposes to adjust OP densities by setting the OP to IS flow to zero and scaling the remaining flows to 100 percent.

B. Participant Comments

Pitney Bowes and the Public Representative support the proposed change. Although Pitney Bowes agrees that the Postal Service's proposal is "backed by sufficient operational logic", it suggests that it would be preferable to develop OP downflow densities specific to MADC flats. Pitney Bowes Comments at 2-3.

C. Commission Analysis

The Commission approves the change in method described in Modification Two. The Commission agrees with the Postal Service, Pitney Bowes, and the Public Representative that Modification Two represents an improvement over the current methodology because it mitigates the effect of including single-piece mail in the downflow densities. The proposed change is also consistent with the methodology for First-Class Mail letters approved in Docket No. RM2011-5.

VI. PROPOSAL EIGHTEEN—MODIFICATIONS TO THE FLATS COST MODELS (MODIFICATION THREE)

A. Postal Service Proposal

Previous versions of the Periodicals flat worksharing cost avoidance models included an error in the calculation of the ADC pallet mechanized bundle sortation in the flats cost models. The Postal Service has provided a corrected cell reference as part of Modification Three.

B. Participants Comments

The Public Representative supports the modification. PR Comments at 12.

C. Commission Analysis

The Commission approves this modification. The corrected model will produce more accurate costs.

VII. PROPOSAL EIGHTEEN—MODIFICATIONS TO THE FLATS COST MODELS (MODIFICATION FOUR)

A. Postal Service Proposal

In Docket No. R2012-3, the Postal Service added a new pallet preparation option for Periodicals mailers, the MADC pallet. Previously, mailers were not allowed to enter mail destinating to multiple ADCs on pallets. With Proposal Eighteen, Modification Four, the Postal Service proposes to add the calculation of the cost of bundles entered on MADC pallets to the Periodicals cost model. The Postal Service proposes to use destination-entered ADC pallets as a proxy for origin-entered MADC pallets because no data is currently available for MADC pallets. As further rationale for the use of this proxy, the Postal Service states that bundles entered on MADC pallets will be processed in the same operations as bundles entered on ADC pallets. Petition at 11.

B. Participant Comments

The Public Representative supports the modification. PR Comments at 12. The Public Representative notes that the Postal Service has used Mixed ADC specific information for costing where it is available.

C. Commission Analysis

The Commission approves this modification. The use of the ADC proxy is appropriate at this juncture as Mixed ADC pallets are likely to be processed in a similar manner as an ADC pallet.²⁶ As mailers adopt this new pricing option, it may be appropriate to periodically ensure that MADC pallets are being processed in the same operational work flow as ADC pallets. To estimate the cost of bundles entered in Mixed

²⁶ The operational flow provided by the Postal Service in this docket indicates that a Mixed ADC pallet will be opened and worked at an Origin ADC. This is a rational approach that leads to an estimated cost for Mixed ADC pallets entered at an Origin ADC that is lower than the estimated cost for Mixed ADC pallets entered at Origin SCFs. The Postal Service should ensure that this operational flow reflects reality as the Postal Service gains experience with real world processing of Periodicals Mixed ADC pallets.

ADC pallets, the Postal Service uses bundle operation flows based on experience with Mixed ADC sacks. This approach is appropriate at this juncture as well because it relies on the best available information.²⁷

VIII. PROPOSAL NINETEEN—MODIFICATION OF THE FIRST-CLASS MAIL PRESORT LETTERS MAIL PROCESSING COST MODEL

A. Postal Service Proposal

Currently, the mail processing cost model only estimates avoided costs for the combined nonautomation machinable MAADC and AADC price categories. The Postal Service proposes to develop separate cost estimates for the nonautomation machinable MAADC and the AADC categories. Petition at 12. This proposed methodological change would be consistent with Proposal Twelve, presented in Docket No. RM2012-1, in which the Postal Service disaggregated the cost estimates for nonautomation machinable MAADC and AADC Standard Mail presort letters. *Id.*

B. Participant Comments

The Public Representative supports this modification and suggests that the Postal Service should be open to methods of disaggregating the remaining combined nonautomation categories. PR Comments at 13.

C. Commission Analysis

The Commission approves the proposal. The proposed approach to disaggregate the avoided costs for First-Class Mail nonautomation machinable MAADC and the AADC categories is reasonable because it parallels the recent modification to

²⁷ The tab “Bundle Data” cells O25 to O29 indicate that all bundles processed at a Mixed ADC will be sorted manually. With the addition of Mixed ADC pallets, it is possible the Postal Service will begin to mechanically sort a portion of these bundles. The calculation of current bundle costs at Mixed ADCs is accurately reflected in the model proposed by the Postal Service. The Postal Service should ensure that the bundle handlings reflect ongoing operational reality.

the Standard Mail presort letters cost model approved by the Commission in Order No. 1153.²⁸

IX. PROPOSAL TWENTY—MODIFICATION OF THE BUSINESS REPLY MAIL COST MODEL

A. Postal Service Proposal

In this proposal, the Postal Service addresses two issues. First, it proposes to continue using the current QBRM avoidable cost model. Second, it proposes to update the data used to calculate QBRM fees. Petition at 15, 18.

In its most recent Annual Compliance Determination (ACD), the Commission reiterated its concern that QBRM avoided costs may be understated. FY2011 ACD at 97. The Commission first expressed this concern in Docket No. R2006-1, where it found that the underlying model may not capture all of the sorts that reply pieces might receive. PRC Op. R2006-1 at 166. This proposal, in part, is a response to that history. Because the Commission observed in its most recent ACD that QBRM avoided costs continued to decrease, the Postal Service also provides some insight as to why that is not unexpected. FY2011 ACD at 97; Petition at 18-19.

In the sections below, the Commission begins with a discussion of the QBRM cost avoidance model, then the proposed update of the QBRM fees.

The continued use of the current QBRM cost avoidance model. The Postal Service proposes to continue using the current cost avoidance model that was introduced in Docket No. R97-1. Petition at 18-19. Pursuant to this methodology, the mail processing cost of a handwritten reply mailpiece serves as the benchmark for comparison to the mail processing costs for a QBRM reply piece to determine the avoided cost estimate. According to the Postal Service, the costs avoided by a QBRM reply piece arise because a handwritten reply mailpiece is processed through the RBCS, while a pre-approved, pre-barcoded reply piece does not. *Id.* at 16. As a result,

²⁸ See Docket No. RM2012-1, Proposal Twelve.

the Postal Service concludes that the only cost difference between a QBRM reply piece and a handwritten reply mailpiece is the RBCS-related cost of applying a barcode to the handwritten reply piece. *Id.* at 17.

The Postal Service notes that in Docket No. R2000-1, Postal Service witness Campbell presented an expanded analysis that included mail processing costs up through the IS operation (citation omitted). *Id.* Witness Campbell's model included processing for OP sortation, outgoing secondary sortation, incoming primary sortation, and IS sortation compared with the Docket No. R97-1 model, that included only the processing for OP sortation. See Docket No. R2000-1, USPS-T-29 at 39, lines 5-9. The Postal Service asserts that a cost saving analysis similar to witness Campbell's is no longer possible because currently there is no way to determine the percentage of Business Reply Mail (BRM) volume that is isolated from the residual single-piece mailstream in the various automation and manual operations.²⁹ Petition at 17. Additionally, the Postal Service contends that typically mail volume is the determining factor for when BRM is isolated from the residual single-piece mailstream for a specific mailer. The Postal Service explains that mail for high volume recipients, regardless of whether it is handwritten or QBRM, is likely isolated in "upstream" operations and mail for low volume recipients is likely isolated in "downstream" operations. From this, the Postal Service concludes that the RBCS-related "barcoding" costs represent the only cost difference between a QBRM mailpiece and a handwritten reply piece and thus, witness Campbell's approach is no longer necessary. *Id.*

The continuing decrease in QBRM avoided costs. The Postal Service asserts that the decrease in QBRM savings over time makes sense when all the empirical facts are considered. *Id.* at 18. The Postal Service explains that the decrease in the QBRM worksharing-related savings estimate is due to the improvement of the Remote Computer Read (RCR) finalization rate. *Id.* The Postal Service uses multiline OCR to develop a barcode for encoding letter mail. Once the barcode is sprayed on the

²⁹ In this context, "isolated" means identifying multiple reply pieces for a single customer, e.g., the customer receiving the return reply piece.

envelope, a mechanized sorting of handwritten pieces is possible. The OCR algorithms, which encode most of the handwritten letter mail, reside in the RCR systems. The RCR system contains character recognition software that can resolve most images once they have been lifted. Images for which the RCR system cannot provide a resolution have to be forwarded to the remote encoding center (REC), where data conversion operators read and resolve images. Consequently, mail that is forwarded to a REC incurs an additional cost. Over the past several years, advances in OCR systems have increased the percentage of handwritten letter mail that can be read fully automatically. *Id.* at 16. Consequently, the avoided cost has decreased.

BRM fee cost studies. Proposal Twenty also updates and revises the productivity estimates used in the BRM fee cost studies. In those studies, many of the productivity estimates are based upon proxies rather than direct observation or measurement of actual activities. Moreover, some of the productivity estimates that are based upon field studies are dated. *Id.* at 15.

The Postal Service relies on two studies to develop inputs used in the cost studies. The first is the BRM Practices Study, which was conducted in 2005 and presented in Docket No. R2006-1, Library Reference USPS LR-L-34. *Id.* at 19. The BRM Practices Study “measure[s] the percentage of mail by price category that is processed using the various counting, rating, and billing methods.” *Id.* It is periodically updated. Based upon recent field observations, the Postal Service states that the data inputs from the 2005 BRM Practices Study “should be relied upon to develop the BRM fee estimates.” *Id.* at 23.

The second study develops productivity data, representing various counting, rating, and billing activities, which have been manually collected at postal field sites. The most recent field study was conducted during the summer of 2011. *Id.* Based upon this study, the Postal Service develops productivity data for the following activities: web Business Reply Mail Accounting System counting, web End of Run counting, machine counting, manual counting, weight averaging counting (letters), weight averaging counting (flats & parcels), PostalOne! billing, and manual billing. *Id.* at 26.

Data from the 2011 Field Study were also used to develop “minutes per day” estimates that support the QBRM quarterly fee and revise the nonletter size BRM monthly fee cost studies.

B. Participant Comments

QBRM Cost Avoidance Model. The Public Representative urges the Commission to reject the Postal Service’s proposal to continue using the cost avoidance methodology for QBRM proposed in Docket No. R97-1. PR Comments at 15. The Public Representative observes that the Postal Service does not account for the point where QBRM mailpieces, both barcoded and handwritten, exit the mailstream and are put on “holdout” for the recipient to retrieve. *Id.* at 14. The Public Representative disagrees with the Postal Service’s assertion that because both handwritten and barcoded mail can exit the mailstream after receiving a minimal or a large number of sorts, the point where the two groups of mail exit the mailstream is irrelevant. The Public Representative argues that while it is true that both handwritten and barcoded mail can exit the mailstream for hold-out at many points in the system, the volume of each type of reply mail at each exit point can make a large difference in their avoided costs. For a mailpiece to exit at a particular exit point, it must undergo a certain number of sorts. The average unit cost for each type of mail depends on the proportion of mail exiting the mailstream at these different points. The Public Representative suggests that the Postal Service could use intelligent mail barcode (IMb) or seeding tests to estimate avoided costs. *Id.*

In response, the Postal Service reiterates that mail volume determines the point at which BRM mailpieces are isolated from the residual single-piece letters mailstream. Postal Service Reply Comments at 6. The Postal Service presents two examples of a utility that receives a high volume of reply mail. *Id.* at 6-7. One of these examples describes how a utility with handwritten reply pieces is isolated after one sortation on a barcode sorter. The other example shows that a utility with barcoded reply pieces is likewise isolated after one sortation. The Postal Service also compares the processing

steps for a low volume handwritten reply mail recipient and a low volume QBRM recipient. *Id.* at 8. The Postal Service asserts that both low volume firms' mail is isolated after the same series of delivery barcode sorter (DBCS) processing steps. The Postal Service concludes that the additional cost required to apply a barcode to the non-barcode mailpieces represents the only mail processing cost difference because once a barcode is added to the handwritten piece both types follow the same processing steps. *Id.*

BRM fee cost studies. No commenters discuss the updates and revisions to the productivity estimates developed in the BRM fee cost studies.

C. Commission Analysis

For the reasons discussed below, the Commission approves the continued use of the current QBRM cost avoidance model with a modification that includes manual sortation. However, the Postal Service should also refine the model to include all the processing steps that replies to low volume recipients incur. The Commission also approves the updated model for calculating QBRM fees because it reflects operational reality and the most recent available data.

The QBRM cost avoidance model has evolved over the years. In Docket No. R97-1, the Postal Service explained that a handwritten reply piece requires remote encoding, while a QBRM piece does not. It is also noteworthy that the model only included the processing for OP. See Docket No. R97-1, USPS-T-23 at 3, lines 1-10. The model also included manual sortation for mail that could not be processed on automation equipment for both QBRM and handwritten pieces. See *id.* at 12. In Docket No. R2000-1, the Postal Service extended the model to include processing for outgoing secondary sortation, incoming primary sortation, and IS sortation. See Docket No. R2000-1, USPS-T-29 at 39, lines 5-9. This version of the model also included manual sortation for each processing operation. See Docket No. R2000-1, USPS LT-I-160, Section L, page 2 and 3 of 5.

In Docket No. R2001-1, the Postal Service modified the model by excluding IS sortation. See Docket No. R2001-1, USPS-T-22 at 26, lines 21-22. Manual sortation continued to be included in the remaining processing operations. See Docket No. R2001-1, USPS LR-J-60, pages 11, 13. In Docket No. R2005-1, the Postal Service reverted to using the Docket No. R97-1 model that incorporated only OP sortation. However, whereas the Docket No. R97-1 model included both automated and manual sortation, this version excluded manual sortation. This was the first time no manual sortation was included. See Docket No. R2005-1, USPS LR-K-69, Section A, pages 2 and 4 of 6.

In Docket No. R2006-1, the Postal Service continued to use the Docket No. R97-1 cost avoidance model with no manual sortation included. See Docket No. R2006-1, USPS LR-L-69, Section A, pages 2 and 4 of 6. However, the Commission expressed concern that the model might not reflect all the sortation levels that QBRM and handwritten mail receive. See PRC Op. R2006-1, ¶ [5225]. The Commission has continued to express this concern in its ACD.

The history of the QBRM cost avoidance model shows that the Postal Service has varied the number of processing operations and whether or not manual sortation should be incorporated. Beginning with Docket No. R2005-1, the Postal Service has not included manual sortation for any processing operation. For this reason, CHIR No. 3, question 4, which addresses manual sortation, was issued.³⁰ In its response, the Postal Service acknowledged that some reply pieces are manually sorted because of unsuccessful attempts at automated sorting. The Postal Service added that cost differences due to manual sortation should not be included because the purpose of the model is to estimate the additional costs of adding a barcode to handwritten pieces.

This history raises two issues: (1) what processing operations should be included in the model; and (2) whether the cost of manual sortation should be included.

³⁰ Chairman's Information Request No. 3, April 19, 2012 (CHIR No. 3).

The Postal Service explains that for high volume recipients, the only relevant operation is OP, because the DBCS will likely have a bin for that customer, e.g., reply pieces can be isolated at that point. From that point, the reply pieces go to the postage due clerks. Postal Service Reply Comments at 6-7. The Postal Service further explains that except for the remote encoding process, the processing of a handwritten reply is the same as for the QBRM piece. It therefore concludes that only the OP sortation should be included in the cost avoidance model. *Id.* at 7.

For low volume recipients, the Postal Service states that, except for remote encoding, both QBRM and handwritten reply pieces require processing operations in addition to OP. The number of additional sorts depends on the point at which there is sufficient volume to isolate mail for a specific customer. *Id.* at 8.

Using an exact piece analysis, one would compare the processing accorded to a handwritten reply with the processing accorded to the same reply piece, but with a barcode on it. If the sorting cost per piece is the same for a QBRM piece and a handwritten reply at each processing level, then the cost differential would not change level by level, e.g., the cost differential calculated at the OP level would be the same after adding the cost of outgoing secondary, incoming primary, and IS mail. This supports the approach of using a model that incorporates only OP even if the reply piece receives additional sorts. However, if QBRM and handwritten reply pieces incur different proportions of automated and manual sortation at each processing operation, the cost difference will vary by operation. Based on the Postal Service's response to CHIR No. 3, question 4, which is consistent with its testimony in Docket Nos. R97-1, R2000-1, and R2001-1, and its reply comments in this rulemaking where it states that low volume reply mail receives additional processing beyond OP, the Commission concludes that the current cost avoidance model should be modified to include all applicable processing operations and manual sortation.

According to the Postal Service, it does not collect sufficient information to identify the proportion of reply pieces that incur manual sortation in every processing operation. However, it did provide the information for the OP-based FY 2008 data,

which is the most recent data available. For this reason, the Commission has modified the model to include the cost of manual sortation. The Commission expects the Postal Service to consider revising its model to include all applicable processing operations and manual sortation when it is feasible to do so.

The Public Representative's concern that the point at which replies are isolated affects the cost differential is valid. However, the lack of sufficient information prevents any immediate revision to the current model to reflect the cost difference. The Postal Service should explore a way to fix this in the future. Also, the Postal Service's contention that the cost avoidance should be expected to shrink over time is reasonable given the evidence it provided on improvements in automation.

With the modification to the QBRM cost model discussed above, a more accurate passthrough for QBRM cards and QBRM letters can be calculated. This is important because, by law, 39 U.S.C. 3622(e)(2), workshare discounts may not exceed avoidable cost except under specific circumstances.

Using the modified approach, *i.e.*, including the cost of manual sortation in the OP operation, the worksharing unit cost for a handwritten reply increases from 2.375 cents to 4.010 cents. Similarly, the worksharing unit cost for a QBRM piece increases from 1.542 cents to 2.355 cents. The resulting avoided cost difference increases from 0.8 cents to 1.7 cents. Further, because the avoided cost increases while the discount remains the same, the cost coverage is reduced from 287.5 percent, shown in the FY2011 ACD, to 135 percent. See Library Reference PRC-RM2012-2-LR2; FY2011 ACD at 97. The modified worksharing costs also include updated accept and reject rates provided by the Postal Service in response to CHIR No. 4, question 2.

It is ordered:

1. For purposes of periodic reporting to the Commission, the Commission accepts the changes in analytical principles proposed by the Postal Service in Proposals Sixteen through Nineteen in Docket No. RM2012-2 as set forth in the body of this Order.

2. For purposes of periodic reporting to the Commission, the Commission accepts the changes in analytical principles proposed by the Postal Service in Proposal Twenty, as modified by the Commission. The modification is described in the body of this Order.

By the Commission.

Ruth Ann Abrams
Acting Secretary